

REMARKS

Claims 577-600 have been examined and are pending in the present application. In view of the following remarks, the Applicant respectfully requests reconsideration of the rejections and allowance of the application.

Rejections under 35 U.S.C. § 103

The Examiner asserts that claims 577, 580-583, 586-590, 592, 594-598, and 600 are rejected under 35 U.S.C. § 103(a) as being unpatentable over “A Multimedia Synchronization Protocol for Multicast Groups” (*Benslimane*) in view of “Precision Synchronization of Computer Network Clocks” (*Mills*). *Office Action*, 5 (also see *Office Action*, 9 with respect to claim 586). The Applicant respectfully traverses the rejection because the cited references, separately and in combination, fail to disclose all of the claimed elements for at least the reasons discussed below.

Parenthetically, similar reasons to those discussed below were included in the response dated April 22, 2009 (*Response D*). The Applicant does not believe the Examiner has properly responded to the arguments included in *Response D*. In response to the Applicant’s arguments included in *Response D*, the Examiner repeatedly pointed to case law and stated that “one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.” *Office Action*, 3 (citing *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)).

The Applicant does not disagree with precedent established by the courts. The Applicant's arguments, however, were in direct response to those presented by the Examiner in which the Examiner asserted that certain claim elements were taught by a **single reference**. The Applicant respectfully submits that when the Examiner uses a **single reference** to assert that a **particular claim element** is taught, the Applicant's attack of that singular reference is appropriate to show that the particular claim element is not disclosed by the reference, and that therefore the entire claim is not disclosed or suggested by the prior art.

Dismissing the Applicant's arguments in this manner is improper, at least, because "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and **answer the substance of it.**" MPEP § 707.07(f) (emphasis added); also see *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995) and MPEP § 2145. Answering the substance of the Applicant's arguments is critical because "of the fact that in every case the applicant is entitled to a full and fair hearing, and that a **clear issue** between applicant and examiner should be developed." MPEP § 706.07 (emphasis added).

1. The cited references fail to disclose a source device that is configured to transmit a media stream, wherein the media stream comprises source-clock information related to an independent clock associated with the source device.

The combination of *Benslimane* and *Mills* fails to disclose that "the source device is configured to transmit a media stream, the media stream comprising **source-clock information related to an independent clock associated with the source device,**" as set forth in independent claims 577 and 590 (emphasis added). The Examiner asserts that *Benslimane* discloses an altered form of this claim

element, particularly that “the source device is configured to transmit a media stream, the media stream comprising a **time differential**.” *Office Action*, 6 (citing the “Sync message’s delta” from *Benslimane*, sect. 3.1.1) (emphasis added). It must be noted that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art,” not alternative terms of the Examiner’s choosing. *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Nevertheless, as discussed in *Response D*, the Applicant believes that the cited references fail to disclose that “the source device is configured to transmit a media stream, the media stream comprising **source-clock information related to an independent clock associated with the source device**,” as set forth in independent claim 590 (emphasis added), for at least the following reasons.

First, the time differential described in claim 590 (not to be confused with the source-clock information related to an independent clock associated with the source device) is not included in the media stream. Instead, the time differential set forth in claim 590 is determined by the playback devices based on information included in the media stream (*i.e.*, the source-clock information) and the independent clocks associated with the playback devices themselves. Therefore, the **time differential** of claim 590 exists at the playback devices and is clearly not comprised by the media stream. As such, the assertion that *Benslimane* discloses “the source device is configured to transmit a media stream, the media stream comprising a **time differential**” is inconsequential.

Second, the media stream set forth in claim 590 cannot be equated to the sync message of *Benslimane*. *Benslimane*’s sync message is merely a discrete unit of information (*i.e.*, $\text{SYNC}(\delta_i, d_i, \tau_s, d^{\text{max}})$). As commonly known and thoroughly described in the record, the term ‘media stream’ is understood as a continuous sequence of audio or audio-and-video through a network. *Benslimane* is silent with respect to the sync message comprising a continuous sequence of audio or

audio-and-video, and is silent with respect the sync message being included in a continuous sequence of audio or audio-and-video. *Benslimane* supports this reasoning by explaining that “[i]n this paper, message broadcasts between the server and the clients are supposed to be **an atomic action where only one message** is taken into account and not n.” *Benslimane*, sect. 3 (emphasis added).

Third, the alleged ‘time differential’ of *Benslimane* (i.e., the sync message’s δ_i) is described as the “difference of time between arrival RESPONSE message from C_i and the one having made the maximum delay.” *Benslimane*, sect. 3.1.1. Contrastingly, the time differential set forth in claim 590 is “a time differential between the independent clock associated with the source device and one or more independent clocks associated with the one or more playback devices based on the source-clock information.” A time differential between independent clocks of different devices is not disclosed or obvious in view of a difference of time between two messages received by the same device.

Based at least on these remarks, Applicant contends that *Benslimane*, separately or in combination with *Mills*, fails to disclose “wherein the source device is configured to transmit a media stream, the media stream comprising source-clock information related to an independent clock associated with the source device,” as set forth in independent claims 577 and 590. Furthermore, Applicant believes the Examiner’s assertion that *Benslimane* teaches “wherein the source device is configured to transmit a media stream, the media stream comprising a time differential” is moot because a “media stream comprising a time differential” is not claimed.

2. The cited references fail to disclose one or more playback devices configured to output a media stream via two or more playback devices in synchrony based on a time differential, wherein the two or more playback devices are in synchrony when a user observing the outputting of the media stream is unable to perceive time-delay differences between the two or more playback devices.

The combination of *Benslimane* and *Mills* fails to disclose that “the one or more playback devices are configured ... to output the media stream via two or more playback devices in synchrony based on the time differential, the two or more playback devices being in synchrony when a user observing the outputting of the media stream is unable to perceive time-delay differences between the two or more playback devices,” as set forth in claim 590. The Examiner asserts, however, that *Benslimane* discloses this element in that “sect. 3.1.1 provides for calculating restitution time based on playback offset differential,” while sect. 3.1.2 “provides for inter-client synchronization.” *Office Action*, 6. The Applicant respectfully disagrees with this assertion.

As discussed in *Response D*, the Applicant believes the Examiner is equating a “playback offset differential” with the time differential of claim 590. The Applicant respectfully notes that, in claim 590, the “time differential [is] between the independent clock associated with the source device and one or more independent clocks associated with the one or more playback devices.” Furthermore, the Applicant observes a contradiction in that the Examiner first equates the time differential of claim 590 with the delta of the sync message (*i.e.*, the “ δ_i ” in $\text{SYNC}(\delta_i, d_i, \tau_s, d^{\max})$), as discussed above.

Nevertheless, Applicant disagrees that *Benslimane* calculates restitution time based on playback offset differential. *Benslimane* defines restitution time as:

$$T_{rest_i}^{-1} = h_i + d^{max} - d_i,$$

where $h_i = s_i + \delta_i + 2 \cdot d_i$. None of the variables that the restitution time is defined by appear to be a playback offset differential. *Benslimane* defines the constituent variables of the restitution time in sect. 3.1.1. as follows:

s_i = local reception time;

δ_i = difference of time between arrival RESPONSE message
from C_i and the one having made the maximum delay;

d_i = delay between the server S and the client C_i ; and

d^{max} = the maximum delay of all clients.

Clearly, *Benslimane* does not calculate restitution time based on playback offset differential, but rather as a combination of local receipt times, arrival times, and delays. As such, *Benslimane* fails to teach “output[ting] the media stream ... in synchrony based on the time differential,” as set forth in claim 590.

Based at least on these remarks, Applicant contends that *Benslimane*, separately or in combination with *Mills*, fails to disclose “the one or more playback devices are configured ... to output the media stream via two or more playback devices in synchrony based on the time differential, the two or more playback devices being in synchrony when a user observing the outputting of the media stream is unable to perceive time-delay differences between the two or more playback devices,” as set forth in claim 590.

The Applicant has provided evidence that the combination of the cited references fail to disclose all of the elements claimed in independent claim 590. To support a conclusion that the claim would have been obvious requires that all the claimed elements were known in the prior art and that one skilled in the art could have combined those elements. See *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1739 (2007)(emphasis added); see also MPEP § 2143. Therefore, claim 590 is patentable over the cited references. Additionally, as independent claims 577 and 600 include similar elements to those of independent claim 590, claims 577 and 600 are likewise patentable for at least the same reasons. Furthermore, as a dependent claim incorporates by reference all the limitations of the claim from which it depends (see 35 U.S.C. § 112 ¶ 4), claims 580-583, 587-588, 592, and 594-598 are patentable for at least the same reasons as the independent claim from which they depend.

The Examiner further asserts that claims 578, 579, 591, and 599 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Benslimane* in view of *Mills*, and further in view of Official Notices (*Office Action*, 10) and that claims 584, 585, and 593 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Benslimane* in view of *Mills*, and further in view of U.S. Pub. No. 2004/0203378 (*Powers*). *Office Action*, 12. The Applicant respectfully traverses these rejections. As a dependent claim incorporates by reference all the limitations of the claim from which it depends (see 35 U.S.C. § 112 ¶ 4), claims 578, 579, 584, 585, 591, 593, and 599 are patentable for at least the same reasons as the independent claim from which they depend.

CONCLUSION

The Applicants submit this response within two months of the mailing date of the *Office Action* and respectfully request an Advisory Action.

The rejection of claims 577-600 under 35 U.S.C. § 103(a) is overcome because the cited references, in combination and separately, fail to disclose each and every claimed element.

Based on the foregoing remarks, the Applicant believes the rejections to the claims have been overcome, and that the present application is in condition for allowance. The Examiner is invited to contact the Applicant's undersigned representative with any questions concerning this matter.

Respectfully submitted,
Nicholas A. J. Millington

September 11, 2009

By: /Ian C. Schick/
Ian C. Schick, Ph.D. (Reg. No. 63,293)
Carr & Ferrell LLP
2200 Geng Road
Palo Alto, CA 94303
T: 650.812.3400
F: 650.812.3444